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# Visually Interpreting Experience: Circle of Visual Interpretation Methodology

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## ABSTRACT

This paper provides an overview of the *Circle of Visual Interpretation* methodology that is workshopped during Interacción 2014. This new method uses visual interpretation techniques to phenomenologically reveal extra detail of user behaviour from within user research. The *Circle of Visual Interpretation* methodology is aimed at design teams engaged in designing interactions to use during their ideation phase. Through visual interpretation a dialogue between designers and their target audience is phenomenologically crafted. From engaging in this *hermeneutic-semiotic* process fresh understanding regarding user motivations behind user actions visually emerges. In this paper each practical step in this methodology is summarised and illustrated with examples from a user research project.

## Categories and Subject Descriptors

H.5.m. Information Interfaces And Presentation; A.0 General; H.1.m Miscellaneous; E.m Miscellaneous.

## General Terms

Design, Experimentation, Human Factors, Theory.

## Keywords

Hermeneutic Phenomenology, Interaction Design, Methodology, Method Cards, User Experience, Moments, Visual Communication, Visual Interpretation.

## INTRODUCTION

The *Circle of Visual Interpretation* methodology is a new qualitative method that synthesises Heideggerian hermeneutic phenomenology, practical Visual Communication techniques, and the semiosis of the pragmatist C.S. Peirce [1] (*hermeneutic-semiosis*) into an immersive and discursive visual existential dialogue between designer and user. It is designed to help interaction designers during their ideation phase to improve future interaction designs through visually understanding the existential themes that define a user experience. By adapting a philosophical tool called a hermeneutic circle [2] to reveal the essence [3] of an experience, visual interpretations of what users really do, think, feel, etc., can be crafted by designers. The methodology probes

“what is genuinely discoverable and potentially there, but not often seen” [4]. These visual interpretations inform a design team by facilitating a deeper (visually communicated) understanding of the micro and macro states of an experience at the same time that reveals the subconscious motivations of users when they’re engaged in an interaction. The method is structured through a set of method cards that allow for modularity and adaptation to the needs of a design team, and this paper gives an overview of the process with examples of visual interpretations. These example interpretations are visualisations of an aesthetic experience of using an unfamiliar touchscreen in a gallery setting, taken from a previous *Internal | External 2010* project.

## INTERNAL | EXTERNAL 2010 PROJECT

This paper is constrained within a word count that cannot provide enough space to go into depth about *Internal | External 2010*. *Internal | External 2010* was a research project identifying evidence of an aesthetic experience [5], and took place in the University of Edinburgh’s Inspace gallery. Eleven participants were immersed within an experience of using a touchscreen in a gallery context against a time constraint. Csikszentmihalyi’s eight major components of a *phenomenology of enjoyment* [6] were used to identify the aesthetic experience. From this a “sensation of [the users] own actions” [7] was captured qualitatively as “sensory data” [8] through videoed observation, an experience probe, and two semi-structured contextual interviews. This sensory data formed the raw user research to later apply the *Circle of Visual Interpretation* methodology to.

## CIRCLE OF VISUAL INTERPRETATION METHODOLOGY

### Part 1: Coding Key Experiential Moments

**Step 1:** Building on the van Kaam coding method [9] that Moustakas adapted, [10] user research on a shared interactive experience (similar to the one a design team needs to design for) is phenomenologically examined to identify and label key moments from beginning to end of that experience. Once key moments are coded as such the visual interpretation begins.

### Part 2: Visually Interpreting Core Themes

Using the method cards a visual hermeneutic circle of interpretation begins to reveal the core THEMES of a user’s experience. **Steps 2-3:** Within each experiential moment there is an *object* that forms the focus for interpreting a core THEME of that moment. Its *object* is itself defined by a specific *quality* and a *context*, which are each visually interpreted before combining them together in Step 3 to construct a single image that represents that moment (Fig. 1) as the designer understands it.





From left to right: Figure 1. An individual moment explained. Figure 2. One individual's experience visually interpreted. Figure 3. Clustering. Figure 4. A final visual interpretation of the structure of an experience.

**Step 4:** These individual visually interpreted moments of each user's experience are placed in sequential order (Fig.2) into a new image that forms a thematic storyboard of each user's visually interpreted experience. By doing so the parts that make the whole experience can be compared to show what is variable in such an experience and what doesn't vary. It is these unvarying THEMES that phenomenologically communicate the collective experience the designer needs to understand.

### Part 3: Visually Interpreting Experiential Structure

As Steps 3-4 reduce several individual experiences into individual visual interpretations of an experience, **Steps 5-7** circle deeper into revealing the structures behind what was collectively experienced. **Step 5:** By identifying all non-varying THEMES from Step 4 they are clustered around common areas for the last phase of phenomenological reduction. These clustered themes are indicative of the parts that map a structuring of the whole experience. Those THEMES that are unique to only one user do not qualify and are dismissed as for being too idiosyncratic.

**Step 6:** Once all non-varying THEMES are clustered a new synthesised image (Fig. 3) is visually interpreted to summarise each general THEME. This reduces the each THEME beyond any one personal testimony to reveal the shared experiential structure of the whole studied experience. **Step 7:** Finally one combined sequential visual interpretation of the experiential structure is revealed (Fig. 4), providing a visual story that takes a similar form to Step 4 as a sequence of what was commonly seen, felt and done in the whole experience.

## DISCUSSION AND FURTHER WORK

Using a methodology based on phenomenology can be daunting for those coming to it for the first time. Therefore the choice to disseminate the *Circle of Visual Interpretation* methodology as method cards follows an industry precedent [11] as a model that all types of interaction or user experience designers would be familiar with. Underpinning the cards is a strong theoretical ground that can be summarised as *hermeneutic-semiosis*, as it synthesises hermeneutic phenomenology with Peircean semiosis in order to visually interpret experiences. The methodology is modular and the cards offer a way for designers to use some of or all of the methodology as desired, depending upon confidence levels, experience and specific user research.

The methodology is a discursive and immersive existential dialogue between designer and the potential user, one that creates a visual language through *hermeneutic-semiosis* to explain user motivations that emerge from the designer's own phenomenological enquiry into the user research. The method

cards are not commercially available and as the methodology is used or workshopped at conferences then the pack of method cards are iteratively updated. The methodology has previously been workshopped with interaction designers, with them taking a pack of method cards back to their own organisations to apply the method in their own projects. As designers engage in applying the methodology in their own ideation phases, feedback from their findings will iteratively develop the method cards into a more streamlined process.

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